

# CVEQ 100 Series SVEQ 100 Series

VIDEO AND AUDIO LINE DRIVERS  
WITH GAIN AND EQUALIZATION



SVEQ 100 D



CVEQ 100



CVEQ 100 MAAP

SVEQ 100 AAP

- Drives composite video or S-video up to 1000' (300 m) on Extron MHR or equivalent cable
- Drives stereo audio up to 1000' (300 m) on Extron STP or equivalent cable
- Independent gain and EQ adjustment
- Buffers and balances audio input
- Compatible with NTSC, PAL, and SECAM
- Choice of tabletop / rack-mount, wall mount, or architectural mount versions
- External universal power supply included

The Extron CVEQ 100 Series and SVEQ 100 Series are high performance one input, one output video and audio line drivers. They are capable of driving composite video or S-video plus stereo audio signals 1000' (300 m) or more using standard video and audio cables. The CVEQ 100 Series and SVEQ 100 Series are available in tabletop / rack-mount, wall mount, and architectural mount versions that provide flexibility of integration in both permanent and temporary applications.



## Extron® Electronics

[www.extron.com](http://www.extron.com)

## DESCRIPTION

The **CVEQ 100 Series** and **SVEQ 100 Series** are one input, one output, high-performance line drivers for composite video and S-video, respectively, and stereo audio. They are ideal for applications in which video and audio signals must be routed over long distances.

The CVEQ 100 Series and SVEQ 100 Series feature independent gain and EQ adjustments which compensate for signal losses due to long cable runs. The gain control compensates for signal voltage losses due to cable resistance, and allows for brightness adjustment by varying the overall voltage of the signal. EQ, or Equalization, compensates for loss of sharpness and high frequency detail due to cable capacitance. Both gain and EQ condition the video signal, offering optimum picture quality regardless of cable length.

All models feature active audio buffering which converts unbalanced audio signals to balanced line level and simplifies integration of consumer-grade A/V products in commercial or professional-grade systems. Balanced audio signals are less susceptible to noise, and due to the inherent +6 dB signal gain, allow for cable runs up to 1,000' (300 m).

The CVEQ 100 Series and SVEQ 100 Series are available in a variety of form factors to fit different needs. The CVEQ 100 and SVEQ 100 are housed in quarter-rack width metal enclosures which are perfect for rack or tabletop mounting in both permanent or rental and staging applications. The Decora-mount CVEQ 100 D and SVEQ 100 D provide an attractive, wall-mountable solution for environments such as auditoriums, boardrooms, and lecture halls. The AAP - Architectural Adapter Plate and MAAP - Mini Architectural Adapter Plate versions mount easily in Cable Cubby® furniture-mountable access enclosures, HSA - Hideaway Surface Access enclosures, floor boxes, and similar applications.

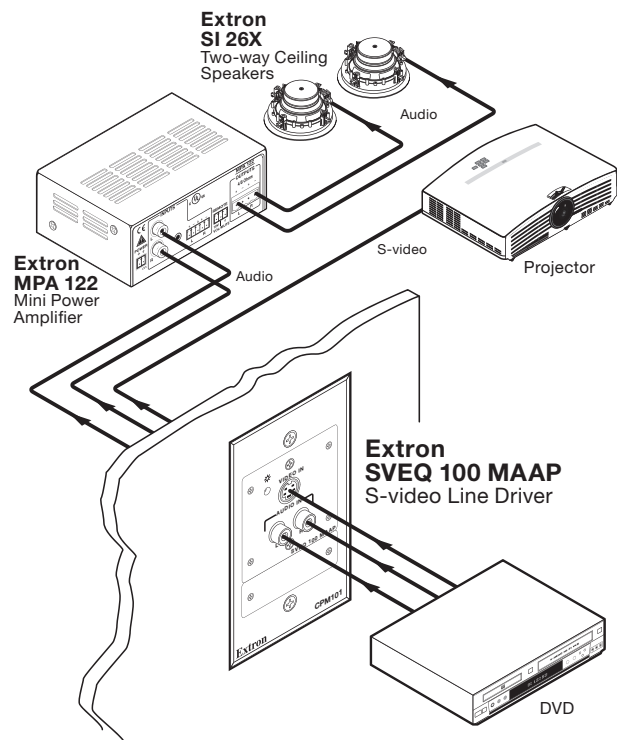
## I/O CONNECTIVITY

Model	Inputs		Outputs	
	Video	Audio	Video	Audio
<b>CVEQ 100</b>	Composite BNC (1)	Unbalanced RCA (2)	Composite BNC (1)	Bal./Unbal. 3.5 mm captive screw (1)
<b>SVEQ 100</b>	S-Video BNC (2)	Unbalanced RCA (2)	S-Video BNC (2)	Bal./Unbal. 3.5 mm captive screw (1)
<b>CVEQ 100 D</b>	Composite RCA (1)	Unbalanced RCA (2)	Composite BNC (1)	Bal./Unbal. 3.5 mm captive screw (1)
<b>SVEQ 100 D</b>	S-video 4-pin mini DIN (1)	Unbalanced RCA (2)	S-Video BNC (2)	Bal./Unbal. 3.5 mm captive screw (1)
<b>CVEQ 100 AAP/MAAP</b>	Composite RCA (1)	Composite RCA (2)	Composite BNC (1)	Bal./Unbal. 3.5 mm captive screw (1)
<b>SVEQ 100 AAP/MAAP</b>	S-video 4-pin mini DIN (1)	Unbalanced RCA (2)	S-Video BNC (2)	Bal./Unbal. 3.5 mm captive screw (1)

## FEATURES

- **Long distance video line driver** – Drives composite video or S-video up to 1000' (300 m) on Extron MHR or equivalent cable.
- **Long distance audio line driver** – Drives stereo audio up to 1000' (300 m) on Extron STP or equivalent cable.
- **Adjustable gain control** – Compensates for signal voltage losses due to cable resistance.
- **Adjustable EQ control** – Compensates for loss of sharpness and high frequency detail due to cable capacitance.
- **Buffers and balances audio input** – Converts unbalanced audio signals to balanced line level signals.
- **Selectable stereo or dual mono audio output - on all models except CVEQ 100 and SVEQ 100** – Choice of stereo audio or actively-summed L+R mono audio on both outputs simplifies integration in program and distributed audio system designs.
- **Compatible with NTSC, PAL, and SECAM**
- **Choice of tabletop / rack-mount, wall mount, or architectural mount versions**
- **External universal power supply included** – Provides worldwide power compatibility.

## APPLICATION DIAGRAM

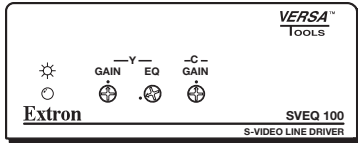


<b>VIDEO</b>	
Gain .....	Composite video and Y of S-video: -1 dB to +3 dB (x0.9 to x1.4), adjustable C of S-video: 0 dB to +10 dB (x1 to x3), adjustable
Equalization .....	0 dB to +7 dB (x1 to x2) at 5 MHz, adjustable
Bandwidth (Y of S-video) .....	185 MHz (-3 dB)
Output cable driving distance .....	Up to 1000' (300 m) with Extron MHR cable
<b>VIDEO INPUT</b>	
Number/signal type .....	1 composite video
CVEQ 100 Series .....	1 composite video
SVEQ 100 Series .....	1 S-video
Connectors .....	
CVEQ 100 .....	1 female BNC
CVEQ 100 D, CVEQ 100 AAP, CVEQ 100 MAAP .....	1 female RCA
SVEQ 100 .....	2 female BNC
SVEQ 100 D, SVEQ 100 AAP, SVEQ 100 MAAP .....	1 female 4-pin mini DIN
Nominal level .....	1 Vp-p for Y of S-video, and for composite video (including sync) 0.3 Vp-p for C of S-video
Minimum/maximum levels .....	
CVEQ 100 Series .....	0.4 to 2.0 Vp-p with no offset at unity gain
SVEQ 100 Series .....	For Y: 0.4 to 2.0 Vp-p with no offset at unity gain
Impedance .....	75 ohms
Return loss .....	<-25 dB @ 0 to 5 MHz
DC offset (max. allowable) .....	4.0 V
Input coupling .....	AC
<b>VIDEO OUTPUT</b>	
Number/signal type .....	1 composite video
CVEQ 100 Series .....	1 composite video
SVEQ 100 Series .....	1 S-video
Connectors .....	
CVEQ 100 .....	1 female BNC
CVEQ 100 D, CVEQ 100 AAP, CVEQ 100 MAAP .....	1 female BNC attached via 4" pigtail
SVEQ 100 .....	2 female BNC
SVEQ 100 D, SVEQ 100 AAP, SVEQ 100 MAAP .....	2 female BNC attached via 4" pigtails
Nominal level .....	1 Vp-p for Y of S-video, and for composite video (including sync) 0.3 Vp-p for C of S-video
Minimum/maximum levels .....	0.4 to 2.0 Vp-p (follows input)
Impedance .....	75 ohms
Return loss .....	-30 dB @ 5 MHz
DC offset .....	±5 mV with no input signal Floating: +0.1 to -0.6 V, depending on input signal content
<b>SYNC</b>	
Standards .....	NTSC 3.58, NTSC 4.43, PAL, SECAM
<b>AUDIO</b>	
Gain .....	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response .....	20 Hz to 20 kHz, +0.05 dB, -0.0 dB
THD + Noise .....	0.015% @ 1 kHz at nominal level
S/N .....	>100 dB at maximum output (unweighted)
Stereo channel separation .....	>80 dB @ 1 kHz
Output cable driving distance .....	Up to 1000' (300 m) with Extron SHR cable
<b>AUDIO INPUT</b>	
Number/signal type .....	1 stereo unbalanced
Connectors .....	2 RCA female
Impedance .....	20k ohms unbalanced, DC coupled
Nominal level .....	-10 dBV (316 mVrms)
Maximum level .....	+8 dBu (2.5 V), unbalanced at 1% THD+N
<b>NOTE:</b> 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu	
<b>AUDIO OUTPUT</b>	
Number/signal type .....	1 stereo, balanced/unbalanced
CVEQ 100, SVEQ 100 .....	1 stereo, balanced/unbalanced
All other models .....	1 stereo or dual mono (switch-selectable), balanced/unbalanced
Connectors .....	(1) 3.5 mm captive screw connector, 5 pole
Impedance .....	50 ohms unbalanced, 100 ohms balanced
Nominal level .....	-10 dBV (316 mVrms), unbalanced; -2 dBu (632 mV), balanced output
Maximum level .....	+9 dBV (2.8 V) unbalanced, +17 dBu (5.6 V) balanced at 1% THD+N with a 10k ohm load

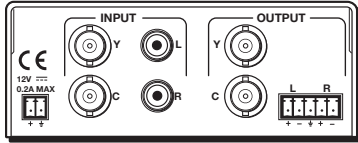
External power supply .....	100 VAC to 240 VAC, 50/60 Hz, external; to 12 VDC, 2 A, regulated	
Power input requirements .....	12 VDC, 0.2 A	
Cooling .....	Convection, no vents	
Mounting .....		
Rack mount .....		
CVEQ 100, SVEQ 100 .....	Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, part #60-190-01; RSB 129, 60-604-01); or 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126, 60-604-10); or VersaTools® 3.5" deep rack shelf (RSF 123, #60-190-20; RSB 129, 60-604-20).	
All other models .....	No, but wall or furniture mountable	
Furniture mount .....		
CVEQ 100, SVEQ 100 .....	Yes, with optional mounting kits	
CVEQ 100 D, SVEQ 100 D .....	Yes, directly, or with a standard electrical wall box or mud ring	
All other models .....	Yes, with optional AAP or MAAP mounting faceplates	
Enclosure type .....		
CVEQ 100, SVEQ 100 .....	Metal	
CVEQ 100 D, SVEQ 100 D .....	Metal rear enclosure, plastic faceplate	
CVEQ 100 AAP, SVEQ 100 AAP .....	Metal faceplate, open at rear	
CVEQ 100 MAAP, SVEQ 100 MAAP .....	Metal faceplate, metal rear enclosure	
Enclosure dimensions .....		
CVEQ 100 .....	1.0" H x 4.3" W x 3.0" D (<1U high, quarter rack wide) (2.5 cm H x 11.0 cm W x 7.6 cm D) (Depth excludes connectors.)	
SVEQ 100 .....	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) (4.3 cm H x 11.0 cm W x 7.6 cm D) (Depth excludes connectors.)	
CVEQ 100 D, SVEQ 100 D .....		
Faceplate .....	2.6" H x 1.3" W x 0.1" D (6.6 cm H x 3.3 cm W x 0.3 cm D) (Fits the opening in a 1 gang Decora faceplate. *Height is 3.8" [9.5 cm], including mounting tabs.) (Depth excludes connectors.)	
Device .....	2.7" H x 1.8" W x 0.75" D (6.9 cm H x 4.6 cm W x 1.9 cm D) (Depth excludes connectors; height excludes mounting tabs.)	
CVEQ 100 AAP, SVEQ 100 AAP .....		
Faceplate .....	1.4" H x 3.5" W x 0.1" D (3.6 cm H x 7.1 cm W x 0.3 cm D) (double space high AAP plate)	
Device .....	1.1" H x 2.8" W x 1.2" D (2.8 cm H x 7.0 cm W x 3.0 cm D) (Depth excludes connectors.)	
CVEQ 100 MAAP, SVEQ 100 MAAP .....		
Faceplate .....	2.1" H x 2.2" W x -1" D (5.3 cm H x 5.7 cm W x 0.3 cm D) (three space MAAP plate)	
Device .....	2.0" H x 1.4" W x 1.2" D (5 cm H x 3.6 cm W x 3.0 cm D) (Depth excludes connectors.)	
Product weight .....		
CVEQ 100, SVEQ 100 .....	0.7 lbs (0.3 kg)	
All other models .....	0.2 lbs (0.1 kg)	
Shipping weight .....		
CVEQ 100, SVEQ 100 .....	3 lbs (2 kg)	
All other models .....	2 lbs (1 kg)	
Listings .....	UL, CUL	
Compliances .....	CE, FCC Class A, VCCI, AS/NZS, ICES	
MTBF .....	30,000 hours	
Warranty .....	3 years parts and labor	
<b>NOTE:</b> All nominal levels are at ±10%.		
Model	Version Description	Part Number
CVEQ 100	Composite video and audio line driver .....	60-812-01
SVEQ 100	S-video and audio line driver .....	60-813-01
CVEQ 100 D	Decora Wallplate .....	60-867-01
SVEQ 100 D	Decora Wallplate .....	60-868-01
CVEQ 100 AAP	AAP Module - Black .....	70-663-02
CVEQ 100 AAP	AAP Module - White .....	70-663-03
SVEQ 100 AAP	AAP Module - Black .....	70-664-02
SVEQ 100 AAP	AAP Module - White .....	70-664-03
CVEQ 100 MAAP	MAAP Module - Black .....	70-667-02
CVEQ 100 MAAP	MAAP Module - White .....	70-667-03
SVEQ 100 MAAP	MAAP Module - Black .....	70-668-02
SVEQ 100 MAAP	MAAP Module - White .....	70-668-03

Specifications are subject to change without notice.

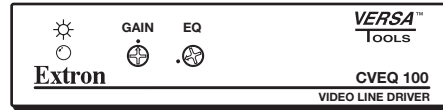
# PANEL DRAWINGS



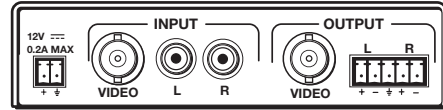
SVEQ 100 - Front



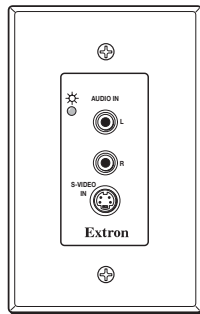
SVEQ 100 - Back



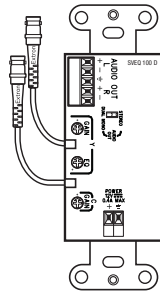
CVEQ 100 - Front



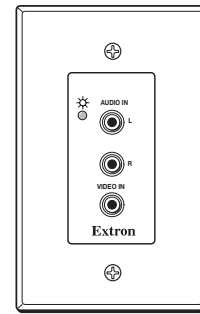
CVEQ 100 - Back



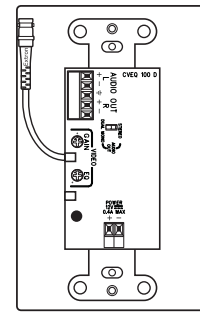
SVEQ 100 D - Front



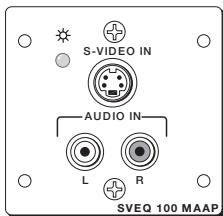
SVEQ 100 D - Back



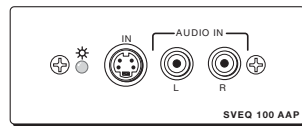
CVEQ 100 D - Front



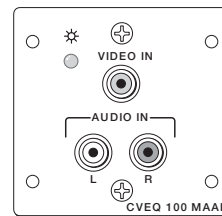
CVEQ 100 D - Back



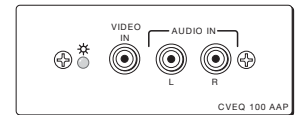
SVEQ 100 MAAP - Front



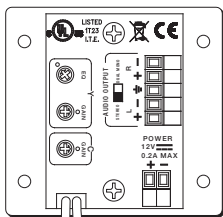
SVEQ 100 AAP - Front



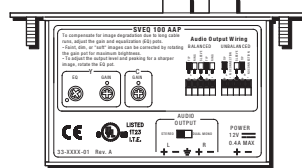
CVEQ 100 MAAP - Front



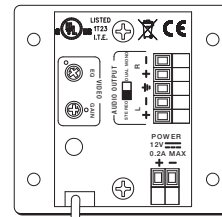
CVEQ 100 AAP - Front



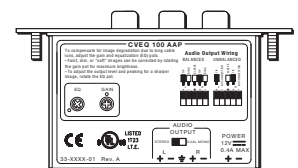
SVEQ 100 MAAP - Back



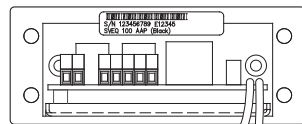
SVEQ 100 AAP - Top



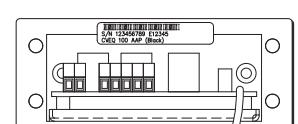
CVEQ 100 MAAP - Back



CVEQ 100 AAP - Top



SVEQ 100 AAP - Back



CVEQ 100 AAP - Back



Extron **USA - West**  
Headquarters  
+800.633.9876  
Inside USA / Canada Only  
+1.714.491.1500  
+1.714.491.1517 FAX

Extron **USA - East**  
+800.633.9876  
Inside USA / Canada Only  
+1.919.863.1794  
+1.919.863.1797 FAX

Extron **Europe**  
+800.3987.6673  
Inside Europe Only  
+31.33.453.4040  
+31.33.453.4050 FAX

Extron **Asia**  
+800.7339.8766  
Inside Asia Only  
+65.6383.4400  
+65.6383.4664 FAX

Extron **Japan**  
+81.3.3511.7655  
+81.3.3511.7656 FAX

Extron **China**  
+400.883.1568  
Inside China Only  
+86.21.3760.1568  
+86.21.3760.1566 FAX

Extron **Dubai**  
+971.4.2991800  
+971.4.2991880 FAX